



5600 B STREET, SUITE 100, ANCHORAGE, ALASKA 99518-1641
(907) 562-3366 FAX: (907) 562-1297

March 28, 1992

Mr. Bob Strong
Alaska Marine Lines
18000 Pacific Highway South Suite 800
Seattle WA 98188

Re: Summary of 2nd Quarterly Groundwater Sampling
7100 Second Avenue & 5615 West Marginal Way
Seattle, Washington

Dear Bob:

The analytical data from the 2nd quarter groundwater sampling event at the 7100 Second Avenue and 5615 West Marginal Way sites are provided in Dames & Moore reports dated March 20, 1992. This letter summarizes our preliminary evaluation of the data collected at both sites during the first and second quarterly sampling events.

5615 West Marginal Way SW

Groundwater levels. The January 1992 groundwater levels were slightly higher than the September 1991 water levels and lower than March 1991 levels. Based on this data, it appears that the annual groundwater low occurred between late summer and mid-winter.

Benzene concentrations. Benzene has been identified only in monitoring well MW-4 which is located immediately adjacent to, and downgradient of, the former UST locations. Benzene has not been detected in either the other three downgradient wells (MW-1, -2, and -3) nor in the upgradient well (MW-5).

In MW-4, the benzene concentration has fluctuated from 53 ug/L in February 1991 (immediately after the well had been installed), to non-detectable in September 1991, to 210 ug/L in January 1992. The state's cleanup level for benzene is 5 ug/L. The cause for these fluctuations in the groundwater benzene concentration is not known

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at this time. The benzene concentrations do not appear to fluctuate consistently with water levels nor with the time of year.

Other gasoline constituents. Total petroleum hydrocarbons (TPH), toluene, ethylbenzene, and xylenes have not been detected in any of the monitoring wells during any of the sampling events. TPH was not reported in monitoring well MW-4 even though low concentrations of benzene have been detected in some of the samples. This is because the detection level for the TPH analysis is above the benzene concentrations that have been detected.

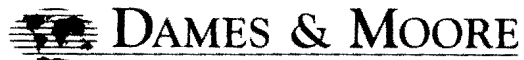
Current site status. Based on the available data, our preliminary assessment concerning site conditions include the following:

- Although benzene is present in the area immediately downgradient of the former UST locations, the areal extent of groundwater which exceeds groundwater cleanup criteria does not appear to be increasing.
- Benzene does not appear to be migrating offsite.

7100 Second Avenue

Groundwater levels. The January 1992 water levels were slightly higher than the September 1992 water levels and variable with respect to the January 1991 water levels. These fluctuations are likely the result of tidal fluctuations in the Duwamish Waterway.

Benzene concentrations. Benzene has been detected in four of the seven site monitoring wells (MW-2, -3, -4, and -7). These wells are the wells closest to the former UST locations. The benzene concentrations are highest in monitoring well MW-4 which adjoins the former gasoline tank. The benzene concentrations in these wells exceed the state's cleanup criteria for benzene, except for monitoring well MW-7. Benzene has not been detected in the monitoring wells installed further downgradient (MW-5 and -6) or upgradient (MW-1) of the former UST locations.



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The cause for the fluctuation in groundwater benzene concentrations is not certain at this time. The benzene concentrations in the wells that are furthest inland from the Duwamish Waterway (MW-2 and MW-3) appear to increase with an increase in water levels while the benzene concentrations in the wells that are closer to the Duwamish Waterway (MW-4 and MW-7) appear to decrease with increasing water levels. The significance of this is not known at this time.

Other gasoline constituents. Although toluene, ethylbenzene, and xylenes have been detected in some of the same wells where benzene has been detected, none of their concentrations exceeded the state's cleanup criteria during this round of sampling. TPH has been detected in previous sampling events in concentrations below the state regulatory criteria, but was not detected in samples collected during this quarter


Current site status. Based on the available data, our preliminary assessment of the site conditions include:

- The area with groundwater benzene concentrations above the regulatory cleanup criteria does not appear to be increasing.
- Benzene or other petroleum hydrocarbons do not appear to be discharging into the Duwamish Waterway.

If you have any questions concerning our findings or activities for this project, please do not hesitate to call.

Sincerely,

Dames & Moore, Inc.


Susan C. Kent
Project Manager